

The Atlantis of the Modern World? The Legal Implications of Sea Level Rise for the Statehood of Small Island States

Rachael Witney*

The rise in sea levels, and the potential for whole countries to disappear below the waves, is arguably one of the most devastating consequences anthropocentric climate change may bring. Unsurprisingly, of particular vulnerability are low-lying small island states that stand mere metres above present sea levels. This article examines the legal implications such a threat poses to the statehood and sovereignty of small island states such as the atoll nations of the Maldives, Tuvalu, Kiribati and the Marshall Islands. In light of a changing climate, this article analyses at what point in time a sovereign state would cease to exist should sea levels continue to rise, the implications of such a disappearance for a state's maritime jurisdiction, and whether current international law has the ability to protect the legal personality of such states that face the threat of losing their effective statehood from causes beyond their control. In doing so, the international law on statehood lies at the heart of this article. As the physical disappearance of an entire state is an unprecedented problem for international law, this article attempts to show that a revised approach to our current understanding of statehood is required in order to achieve equity, security and certainty under international law as small island states face rising tides along their already low-lying coasts.

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1. INTRODUCTION

The “disappearing States” or “sinking islands” phenomenon has become the ... litmus test for the dramatic impacts of climate change on human society... . [P]ondering the dissolution of a state because of climate change rather than conflict, cession, merger or succession entails novel questions that go to the heart of legal rules on the creation and extinction of states.¹

For many years, small island states² have been trying to draw international attention to the particular vulnerability their countries have to the catastrophic effects climate change may bring. Events such as the attempt by the Maldives government in 2009 to highlight the importance of the United Nations Framework Convention on Climate Change (UNFCCC) through an underwater cabinet meeting in the lead-up to the 15th Conference of the Parties have been staged.³ Now, in 2016, and despite such attempts, rising sea levels remain arguably one of the most devastating consequences anthropocentric climate change poses for such nations. Low-lying small island states such as Tuvalu, Kiribati and the Marshall Islands in the Pacific Ocean and the Maldives in the Indian Ocean consisting entirely of atolls — the states examined in this research — are faced with a threat to their very existence.⁴ It comes as no surprise, yet is nonetheless disheartening, therefore, that such nations have been termed as “sinking states” or “disappearing states”.⁵ Concerns such as those raised by Seychelles Ambassador to the United Nations Ronald Jumeau are thought-provoking: “[W]hen you relocate and you lose your country, what happens? What’s your status in the country you relocate to? Who are you? Do you have a government there? Government of what?”⁶

1 J McAdam “‘Disappearing States’, Statelessness and the Boundaries of International Law” in J McAdam (ed) *Climate Change and Displacement: Multidisciplinary Perspectives* (Hart, Oxford, 2010) 105 at 105.

2 Often referred to as small island developing states (SIDS), which are “a distinct group of developing countries facing specific social, economic and environmental vulnerabilities”. See UN-OHRLLS “Small Island Developing States: Small Islands Big(ger) Stakes” (2011) <<http://unohrlls.org/custom-content/uploads/2013/08/SIDS-Small-Islands-Bigger-Stakes.pdf>>.

3 BBC “Maldives cabinet makes a splash” (17 October 2009) <<http://news.bbc.co.uk/2/hi/8311838.stm>>.

4 Maldives, Tuvalu, Kiribati and Marshall Islands identified as “sinking island states” in UN High Commissioner for Refugees “Climate Change and Statelessness: An Overview” (15 May 2009) UNHCR <<http://www.refworld.org/docid/4a2d189d3.html>>.

5 See McAdam, above n 1.

6 Interview with Ronald Jumeau, Seychelles Ambassador to the UN (Neal Conan, National Public Radio, 22 September 2010) transcript provided by NRP News (New York).

Although concern was raised in the 1980s, it was not until the new millennium that much attention was given to the issue of sea level rise with the realisation that we are drawing closer to the agreed point at which climate change could bring catastrophic and irreversible impacts.⁷ Accordingly, academic discourse on the legal implications of rising sea levels for small island states is relatively novel. Sea level rise as a result of climate change encompasses many issues, many of which fall outside the scope of this article, which examines the issues and implications of sea level rise for the statehood and sovereignty of small island states.

Part 2 of the article looks into the scientific background of climate change, detailing the severity of sea level rise on small island states. Part 3 introduces the notion of statehood and the criteria a state must fulfil under the 1993 Montevideo Convention on the Rights and Duties of States⁸ (Montevideo Convention) in order to be classified as a state through the interpretation of a strict legal formula, and examines the circumstances in and extent to which small island states face losing their claim to statehood and corresponding maritime jurisdiction under the 1982 United Nations Convention on the Law of the Sea⁹ (UNCLOS). Part 4 analyses the continuity of statehood under current international law, through the doctrine of state continuity and state practice. However, part 5 highlights that, for the long-term preservation of statehood, there is a need for a contemporary approach to our understanding of statehood through the creation of a new category of the “deterritorialised state”, along with the freezing of maritime baselines. As sea levels rise, the need to confront complex legal issues will also heighten. International law will have to respond to the issues created from our changing environment. Neglecting such issues is not possible; to do so would simply turn “sovereigns into dependents”.¹⁰ This article attempts to provide an adequate response to a dilemma that will impact upon the lives of hundreds of thousands, if not millions.

7 Agreed limit of +2°C warming as point of “dangerous anthropocentric interference with the climate system”. See United Nations Framework Convention on Climate Change (signed 9 May 1992, entered into force 21 March 1994), art 2 [UNFCCC].

8 Montevideo Convention on Rights and Duties of States, 165 LNTS 19 (signed 26 December 1933, entered into force 26 December 1934).

9 United Nations Convention on the Law of the Sea, 1833 UNTS 3 (signed 10 December 1982, entered into force 16 November 1994) [UNCLOS].

10 P Sykes “Sinking States: Climate Change and the Next Refugee Crisis” (28 September 2015) Foreign Affairs <<https://www.foreignaffairs.com/articles/2015-09-28/sinking-states>>.

2. BACKGROUND: CLIMATE CHANGE, RISING SEA LEVELS AND SMALL ISLAND STATES

2.1 Climate Change

There is now widespread and universal acceptance that climate change is occurring. The latest Assessment Report (AR5) from the International Panel on Climate Change (IPCC),¹¹ the body of scientific research on which the UNFCCC is based, clearly concludes:¹²

The IPCC is now 95 percent certain that humans are the main cause of current global warming. In addition ... the more human activities [that] disrupt the climate, the greater the risks of severe, pervasive and irreversible impacts for people and ecosystems, and long-lasting changes in all components of the climate system.

The effects climate change is likely to bring, and the effects climate change has already begun to bring, will impact on all nations globally. However, due to their inherent physical and socio-economic characteristics, small island states are regarded as being some of the most vulnerable countries to such effects. Changes in climatic conditions, combined with other factors such as globalisation, population growth, urban migration, exploitation of resources, degraded ecosystems and low adaptive capacity, “create the extreme vulnerability of small islands”.¹³

In recognition that climate change is occurring, the UNFCCC was established as a means to negotiate and commit to responding to climate change. Article 2 of the Convention outlines the overall aim, which is for the “stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interferences with the climate system”.¹⁴ In achieving such a goal, art 3 outlines that the special circumstances of particularly vulnerable developing countries should be given full consideration. Low-lying and small island states are specifically identified as being such countries.¹⁵ This highlights the vulnerability and endangerment

11 Intergovernmental Panel on Climate Change 2014: *Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge, 2014).

12 At v.

13 J Grote Stoutenburg *Disappearing Island States in International Law* (Brill Nijhoff, Leiden, 2015) at 38.

14 UNFCCC, above n 7, art 2.

15 Articles 3 and 4.8.

of small island nations who are likely to bear disproportionate burdens from the effects of climate change.

Small island states are expected to experience impacts from climate change including sea level rise, tropical and extra-tropical cyclones, increases in temperatures and changes to rainfall patterns.¹⁶ While many of these effects will bring unfavourable consequences to communities living in such states, sea level rise is recognised as being one of the greatest threats.¹⁷ Sea level rise can physically impact upon coastal and low-lying areas from increased flooding, storm surge and saltwater intrusion, yet also has longer-term socio-economic impacts. Ultimately, however, sea level rise has the potential to completely submerge low-lying small island states.

2.2 Sea Level Rise

Contemporary sea level rise is predominantly caused by the thermal expansion of seawater from warming ocean temperatures and by the increase in water mass from melting ice (largely from the Greenland ice sheet) and land water reservoirs.¹⁸ Sea levels are rising and are expected to continue rising at an accelerated rate for centuries even if greenhouse gas emissions are stabilised. The IPCC maintains that it is “virtually certain”¹⁹ that the rate of sea level rise is accelerating.

In AR5, the IPCC produced a set of four Representative Concentration Pathways (RCPs) that represent different scenarios of future emission and atmospheric greenhouse gas concentrations produced from the world at large through to the year 2100. The scenarios are used for making future projections. The RCPs include a stringent greenhouse gas mitigation scenario (RCP2.6), two intermediate scenarios (RCP4.5 and RCP6.0) and a very high emission scenario (RCP8.5). RCP2.6 entails additional worldwide efforts to curtail greenhouse gas emissions and would result in remaining under the accepted limit of 2°C in warming. Continuing business as usual without any additional efforts to lower greenhouse gas emissions would result in scenarios RCP6.0 or RCP8.5.

Meysignac and others noted that, over the course of the 20th century, global mean sea levels rose annually by approximately 1.6–1.8 mm, and since

16 LA Nurse and others “Small Islands” in IPCC *Climate Change 2014: Impacts, Adaption, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report on the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge, 2014) 1613 at 1616.

17 At 1619.

18 RJ Nicholls and A Cazenave “Sea-Level Rise and its Impact on Coastal Zones” (2010) 328(5985) *Science* 1517.

19 Nurse, above n 16, at 1616.

1993, this rate has increased to 3.2 mm per year.²⁰ Similarly, the IPCC recorded that between the period of 1901 and 2010, global mean sea levels rose by 0.19 metres.²¹ Surface temperatures and global mean sea levels are projected to rise over the 21st century under all projected scenarios. The IPCC has projected that over the period of 2081–2100, relative to 1986–2005, global mean sea levels are likely to rise between 0.26–0.55 metres under RCP2.6 and 0.45–0.82 metres under RCP8.5.²² Other studies, such as that by Vermeer and Rahmstorf, estimate a rise of between 75–190 cm by 2100.²³ The rise has the potential to be even more significant if the melting of polar ice sheets accelerates, which may lead to a rise of 2 metres, although a rise of 4 metres appears unlikely.²⁴

However, rates of sea level rise vary from region to region and are not uniform across the globe. Regional fluctuations are caused by changes in ocean currents and surface winds, along with changes to the ocean floor through tectonic movement, affecting the shape and gravitational field of the earth.²⁵ Rates in parts of the tropical Pacific, where many small island states exist, for example, have increased three to four times faster than the global mean rate of 3.2 ± 0.5 mm/year.²⁶ This reinforces the vulnerability of small island states.

2.3 Uninhabitable vs Submersion: Future Uncertainties of Sea Level Rise

Climate change is associated with many uncertainties. Climate change exposes nations, people and ecosystems to risk. Risk arises from the interaction of a hazard (eg rising sea levels), vulnerability (eg susceptibility to harm from low elevations above current sea levels) and the exposure of people and ecosystems, and is often represented as a probability of occurrence. It is important to note that risk can result from both an event with a very high probability of occurring,

20 B Meyssignac and others “An Assessment of Two-Dimensional Past Sea Level Reconstructions Over 1950–2009 Based on Tide-Gauge Data and Different Input Sea Level Grids” (2012) 33(5) *Surveys in Geophysics* 945 at 946. See also JA Church and NJ White “Sea-Level Rise from the Late 19th Century to the Early 21st Century” (2011) 32(4–5) *Surveys in Geophysics* 585 at 585. Compare to 1880 and 1900 where there was a rate of 0.009 ± 0.003 mm/year.

21 IPCC 2014: *Synthesis Report*, above n 11, at 4.

22 At 13.

23 M Vermeer and S Rahmstorf “Global Sea Level Linked to Global Temperature” (2009) 106 *Proceedings of the National Academy of Sciences* 21527 at 21530.

24 M-E Carr and others “Sea Level Rise in a Changing Climate: What Do We Know?” in MB Gerrard and GE Wannier (eds) *Threatened Island Nations: Legal Implications of Rising Sea Levels and a Changing Climate* (Cambridge University Press, New York, 2013) 15 at 37.

25 JA Church and others “2013: Sea Level Change” in IPCC *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge, 2013) 1137 at 1148.

26 Meyssignac and others, above n 20, at 947.

and from an event that has a low probability of occurring but with very severe consequences.²⁷

As shown by the IPCC's RCPs, the projected levels of future emissions remain uncertain. However, despite it being unknown how much sea levels will *actually* rise, only being able to calculate probability through projections, rising will nevertheless occur. The continued rising of sea levels beyond 2100 is likely even if greenhouse gas emissions are curbed.²⁸ Due to its gradual nature, sea level rise will comprise two stages; a low-lying nation will become uninhabitable long before complete inundation of territory. While sea level rise may not initially, or ever, completely engulf a state, it may impact on the liveability of that state to a point where it can no longer sustain human life despite the continued existence of a territory.

Therefore, whether it is partial or complete inundation, sea level rise poses a major risk with severe consequences for small island nations by the end of the 21st century and beyond. As established, a rise of up to 1 metre in global sea levels seems likely by 2100, with the potential for higher. The Maldives, one of the lowest nations in the world, stands at a mean elevation of 1.8 metres. Tuvalu's highest point stands at a mere 5 metres above present sea levels, with the Marshall Islands' highest point of elevation not far behind at 10 metres. Kiribati's highest point is 81 metres, yet as with the Marshall Islands and Tuvalu, the average height of the atoll is only a few metres above sea level.²⁹ The remainder of this article assesses the legal implications of sea level rise for statehood and sovereignty — legal concepts that are threatened, and have the possibility of being extinguished, based on the predictions outlined above.

3. THE PROBLEM: WHAT IS AT STAKE?

3.1 The Legal Concept of Statehood

The concept of a state is arguably one of the single most important features in the contemporary international legal system. The status of statehood confers not only the right for a nation to participate in the international legal arena,

27 IPCC 2014: *Synthesis Report*, above n 11, at 36.

28 At 74. Also notes that while sea level rise for RCP2.6 remains under 1 metre, scenario RCP8.5 could result in a rise by over 3 metres by 2300 (medium confidence).

29 Central Intelligence Agency "The World Factbook: Maldives" <<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/mv.html>>; "The World Factbook: Tuvalu" <<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/tv.html>>; "The World Factbook: Marshall Islands" <<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/rm.html>>; "The World Factbook: Kiribati" <<https://www.cia.gov/library/publications/resources/the-world-factbook/geos/kr.html>>.

but allows also for the creation and operation of international law. On a more local level, statehood confers the right of an independent governing authority to exercise sovereignty over an area of territory.

Nations such as Tuvalu, Kiribati, the Marshall Islands and the Maldives are all internationally recognised as states.³⁰ That is, they currently fulfil the declarative requirements of being a state, established in the 1933 Montevideo Convention, which is recognised as being in accordance with international customary law.³¹ Accordingly, the concept of “disappearing states” is not concerned with ascertaining whether claims of statehood subsist, but with the continuity of statehood. In short, at what point in time does a state that is currently a state cease to exist as a state due to rising sea levels? This is premised on the assumption that, at some point in time, the territory of small island states will become partially or completely engulfed by water so as to render the land unable to sustain human life.

Such an issue is unprecedented. International law has seen states come to an end, primarily as a result of conflict and politics, but it has been the legal entity rather than the physical territory of those states which has been extinguished. Examples of dismemberment, merger, incorporation and secession — ways in which states have ceased to exist to date — all involve a territory being taken over or ceded to another state.³² As McAdam describes it, “there is never simply a void”.³³ However, as Crawford and Rayfuse neatly summarise the issue, small island nations:³⁴

have not chosen to dissolve their state, but they nonetheless have lost fundamental Montevideo criteria ... would a semi-autonomous region within another sovereign state, or an artificial island, still be Tuvalu or the Maldives? It is this question that lies at the heart of the challenge to international law.

The issues related to the factual disappearance of a state are, therefore, novelties for the legal arena in the 21st century.

The concept and criteria for statehood, usually discussed in relation to the creation of states, is an important starting point in considering at what point in time a state may be denied the recognition of statehood by the international community under international law. The notion of a state is not a modern

30 United Nations “Member States” <<http://www.un.org/en/member-states/>>.

31 Montevideo Convention on Rights and Duties of States, above n 8.

32 A Cassese *International Law* (Oxford University Press, Oxford, 2005) at 77.

33 McAdam, above n 1, at 110.

34 R Rayfuse and E Crawford “Climate Change and Statehood” in R Rayfuse and S Scott (eds) *International Law in the Era of Climate Change* (Edward Elgar, Cheltenham, 2012) 243 at 249.

concept. A “state” dates back as early as the 17th century, when Grotius defined it as a “complete association of free men, joined together for the enjoyment of rights and for their common interest”,³⁵ bound by the law of nations.

While the concept of a state dates back many centuries, its meaning and legal requirements have evolved over time. For the purposes of this article, it is the concept of statehood under present international law that is relevant for examination. Despite no internationally agreed definition of a “state” existing, the requirements established in the Montevideo Convention are widely acknowledged as constituting the declarative theory of statehood. Article 1 of the Convention establishes that a state “as a person of international law should possess the following qualifications: (a) a permanent population; (b) a defined territory; (c) government; and (d) capacity to enter into relations with other states”.³⁶

3.1.1 Permanent population

The first criterion of statehood is that a state must have a determinate population. International law prescribes no minimum number of people a state ought to have. In numerous UN General Assembly resolutions, the Pitcairn Islands of approximately 50 permanent inhabitants has been acknowledged as having the potential to be considered as a state population for the purposes of statehood.³⁷ Similarly, Jon van Dyke argues that 50 is the threshold for an island to be constituted as an island under UNCLOS, art 121(1), as opposed to it being an uninhabitable rock unable to sustain human habitation or economic life under art 121(3).³⁸ In 2015 the Maldives had a population of approximately 409,000, Tuvalu of 10,000, the Marshall Islands of 53,000 and Kiribati of 112,000.³⁹ Therefore, such island states could substantially reduce in population size and still be regarded as upholding the requirement of a permanent population. Fulfilling this criterion may only be endangered once the entire population has left the territory with a very slight chance of being able to return home.

In addition to a quantitative component, a qualitative element must also be met. While the international law of statehood does not provide a minimum number of inhabitants, it does require the remaining population of an island

35 H Grotius *De Iure Belli ac Pacis* (1646), Bk I, ch I, at xiv.

36 Montevideo Convention on Rights and Duties of States, above n 8, art 1.

37 For example, UNGA Res 2869 (XXVI) (20 December 1971).

38 JM Van Dyke and RA Brooks “Uninhabited Islands: Their Impact on the Ownership of the Ocean’s Resources” (1983) 12 *Ocean Dev & Intl LJ* 265 at 286.

39 The World Bank “Population, Total: Overview Per Country” (2016) <<http://data.worldbank.org/indicator/SP.POP.TOTL>>.

state to live communally. A state is effectively a community of organised people. As Stoutenburg comments:⁴⁰

Applied to the case of “disappearing” island States, this means that as long as enough of the original island infrastructure subsisted to enable an — even small — number of people to continue living on the remaining island territory as a community ... this community could form a “population nucleus” capable of upholding the personal element of statehood.

In order to satisfy this component, it must be established that there is a permanent connection between a population and the use of the territory. The notion of permanency implies that a population cannot be transitory. A population undeniably requires territory as a physical basis to live off. While the requirement of territory will be examined under the second requirement of statehood, the use of the land must be used for an everyday purpose in that the population intends to use the land on a permanent basis rather than for secondary purposes (eg economic projects). In turn, this requires the territory to be inhabitable.⁴¹

In the scenario of sea level rise, if levels rise to such a degree as to render the land uninhabitable, the population requirement would no longer be met. The notion of a permanent population is intrinsically linked to that of territory and, to some extent, an effective government. Consequently, “an exodus of population ... accompanied by, or premised on, the imminent or eventual [physical] loss of territory”⁴² would result in the criterion of permanent population no longer being met.

3.1.2 Defined territory

The second criterion of statehood is a defined territory. Clearly, a state requires a territorial area. “Territorial sovereignty ... involves the exclusive right to display the activities of a State.”⁴³ However, as with population, no minimum area of territory is given, some territory is all that is required (albeit very small

40 J Grote Stoutenburg “When Do States Disappear?: Threshold of Effective Statehood and the Continued Recognition of ‘Deterritorialized’ Island States” in MB Gerrard and GE Wannier (eds) *Threatened Island Nations: Legal Implications of Rising Sea Levels and a Changing Climate* (Cambridge University Press, New York, 2013) 57 at 65.

41 D Raic “Statehood and the Law of Self-Determination” (PhD Dissertation, University of Leiden, 2002) at 58–59.

42 McAdam, above n 1, at 113.

43 *Island of Palmas Case* (Netherlands v United States) (1928) 1 RIAA 829 at 839.

and fragmented land could impact upon the effectiveness of fulfilling other criteria). As Crawford comments:⁴⁴

The only requirement is that the State must consist of a certain coherent territory effectively governed — a formula that suggests that the requirement of territory is rather a constituent of government and independence than a distinct criterion of its own.

As established, while it is virtually certain that sea levels are rising, the magnitude of sea level rise remains uncertain. Rising levels have the potential to simply engulf a small portion of an island state, engulf an island state to such a degree as to render it uninhabitable, or completely submerge an island state under water. Evidently, if there is a complete submersion of territory at high tide, fulfilling this criterion will prove difficult. It has been held by the *Island of Palmas* arbitration that a state is not able to exist in separation from its territory.⁴⁵ However, as sea level rise is a gradual and slow process, it is more likely that an island state's territory will gradually be reduced in size over time. While only some territory is required — meaning that even territory the size of a rock that is classified as land under UNCLOS, art 121(3) could still be regarded as territory — the land that exists must be capable of habitability. As noted with the population requirement, territory provides the basis for a population to inhabit. If a population requires a territory as a basis to live on, it goes without saying that a territory must consequently be able to provide a basis for serving such a purpose. Therefore, an island state would only fail the territorial prerequisite once the entire piece of land became uninhabitable, regardless of whether it is entirely submerged or not.⁴⁶

3.1.3 Government

The third criterion is that of an effective system of government. In simple terms, this is the ability to exercise control over the population and property within a nation's territory. This criterion is twofold: an effective government must both exercise authority to govern and have the right to exercise that authority. While international law does not prescribe the extent to which this control ought to be exercised, some degree of law and order along with the establishment of institutions is needed.⁴⁷ Crawford perceives this element as arguably the most important element of statehood, as all other criteria depend on the capability of

44 J Crawford *The Creation of States in International Law* (2nd ed, Clarendon Press, Oxford, 2006) at 52.

45 *Island of Palmas Case*, above n 43, at 839.

46 Stoutenburg "When Do States Disappear?", above n 40, at 61–62.

47 Crawford, above n 44, at 59.

a governing power. “Governmental authority is the basis for normal inter-State relations; what is an act of a State is defined primarily by reference to its organs of government, legislative, executive or judicial.”⁴⁸

Rising sea levels act as an external threat to small island states. This is a threat that, on a global scale, small island states have played a very minimal role in creating. The issue at hand, therefore, is whether the physical exercise of the governmental control and authority of small island states is threatened to such a degree that would render it ineffective, rather than whether they have a legitimate and uncontested right to such control. In simple words, the rise in sea levels threatens the exercise of authority rather than the right to that authority. In such a case where the independence and authority of a government is legitimate, the right to exercise that control takes precedence over the actual ability to exercise that authority.⁴⁹ Furthermore, it has been acknowledged that for the purposes of establishing statehood, only one of the aspects of an effective government, the exercise of authority or the right to exercise that authority, needs to be present.⁵⁰

In the case of small island states, the existence of a right to exercise authority over a population is enough to satisfy the criterion of government, even in the event where the actual ability to exercise that authority is interfered with. Climate change is associated with the increased frequency and severity of extreme weather events. In the event of a sudden disaster, it is readily imaginable that the internal functions of a government and relations with other states would be temporarily restricted. However, so long as there remains a permanent population with some form of political organisation that has the authority to control and enforce obligations on its subjects (internal component) and execute obligations and relations with other states under international law (external component), then this criterion is likely to be fulfilled even if there are times when the control of the governing authority is compromised.⁵¹

However, as global sea levels continue to rise gradually, the effectiveness of an island state’s government is likely to erode. Generally, a state must maintain “a certain coherent territory effectively governed”,⁵² and governmental power must also be “exercised, or capable of being exercised, with respect to some territory and population”.⁵³ This suggests that population and territory are key to an effective government. While a loss in territory will also impact on the effective operation of a government, because of the nature of sea level rise, it will most likely be the population requirement that will lead to the

48 At 56.

49 At 57.

50 Raic, above n 41, at 408.

51 Stoutenburg “When Do States Disappear?”, above n 40, at 67.

52 Crawford, above n 44, at 52.

53 At 56.

first indication of a loss in statehood.⁵⁴ A government is not able to exercise authority when it has nothing to exercise that authority on. Accordingly, uninhabited territory will result in the failure of a government to be effective. It is important to note that if we move away from a strict interpretation of the declarative theory and towards a more normative approach, the presumption of state continuity and the potential of new forms of government are possibilities in continuing the notion of statehood, which will be examined later.

3.1.4 Capacity to enter into relations with other states

The final criterion for statehood is the capacity to enter into relations with other states. However, Crawford argues that the capacity to enter into such relations is not a requirement for statehood, if it ever was, but merely a consequence of it. Rather, many scholars now argue that it is the independence of a state that determines whether a state has the ability to enter into such relations.⁵⁵ In the *Island of Palmas* arbitration, Arbitrator Max Huber commented:⁵⁶

Sovereignty in the relations between States signifies independence. Independence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other State, the function of a State.

Independence requires a state to have a separate legal existence within reasonably coherent frontiers, and not be subject to the authority of any other state other than that of international law.⁵⁷ Establishing this is twofold: factual capacity and legal capacity. To be factually independent a state must be self-sufficient, which in turn depends on the state in question and its circumstances, such as territorial size and resources available. Legal independence means that a state must not be subject to the legal authority of another state. While some commentators argue that both factual and legal independence are required for statehood, most argue that it is only legal independence that is required. Consequently, a small island state would not lose its independence merely because sea level rise deprived it of the ability to be self-sufficient, so long as it did not become subject to the legal authority of another state. In the case of deterritorialised states, legal independence is “conditioned by the continued — constitutive — recognition of the island state as a State”.⁵⁸ Thus, it would be determined on the voluntary acts of other states to continue to recognise it as a state, a point that will be examined later.

54 McAdam, above n 1, at 106.

55 Crawford, above n 44, at 61–62.

56 *Island of Palmas Case*, above n 43, at 838.

57 Crawford, above n 44, at 66.

58 Stoutenburg “When Do States Disappear?”, above n 40, at 72.

However, once a population has had to go into exile, it is hard to imagine how its people would not become subject to another territorial jurisdiction. While a state may be able to retain the ability to maintain its formal independence — powers of government vested in separate authorities of the punitive state⁵⁹ — the fact that the population and territory may fall under foreign control may eventually result in a state losing its actual independence, meaning it can no longer be regarded as an independent state. Such a circumstance would make it very difficult for an island state to enforce its own wishes on its population and regulate its own internal and external affairs, as an entity that is subject to “foreign domination and control on a permanent or long-term basis is not ‘independent’ for the purposes of statehood in international law”.⁶⁰

3.1.5 Summary

This section has examined whether the loss of the Montevideo criteria of statehood would bring an end to a low-lying small island state’s claim to statehood should sea levels continue to rise. Applying a strict legal framework, a state is required to have a permanent population, defined territory, effective government and independence.

Rising sea levels as a result of anthropocentric climate change will bring gradual changes to small island states. Should an entire territory be permanently submerged under water, there inevitably can be neither population nor government attached to its territory. However, due to the gradual nature of rising sea levels, an island is likely to become uninhabitable long before it is completely inundated by water. If sea levels continue to rise, while “territory ultimately may disappear as a result ... it is more probable that the other indicia of statehood ... will have been challenged prior to this occurrence”.⁶¹

An absence in population and territory will bring about factual changes to the physical basis of an island state; however, it is the associated loss in effective government and independence that will play a more influential role in the ability of a state to maintain legal statehood. Uninhabitable territory appears to be the fine line between when an island state can continue operating as a state and when the ingredients necessary to do so are jeopardised. An uninhabited territory will no longer fulfil the population or territory requirements, even if some territory still exists above sea level. Without either a population or territory, a government has nothing to exercise its authority over, rendering it ineffective. These factors combined, a disappearing island state is unlikely to be considered an independent state, stripping it of its right to claim statehood. In

59 At 67.

60 At 76.

61 McAdam, above n 1, at 108.

other words, while the extinction of an established state is rare, the threat rising sea levels pose as a result of anthropocentric climate change may theatrically, applying the strict legal criteria for statehood, drive disappearing island states into extinction purely on the basis that they no longer meet the declarative requirements.

3.2 Impacts on Maritime Sovereignty: Resource and Maritime Entitlements

The exercise of sovereignty, contingent on the notion of statehood, extends beyond a state's physical territory and to a state's maritime zones. Consequently, a loss in statehood would have implications not only for a state's sovereignty over territory but also for its maritime jurisdiction. Such implications would arise from substantial alterations to the coastlines from which the zones are measured as sea levels begin to encroach landward, or more dramatically, from the complete disappearance of a state's territory or status as a state, effectively eliminating the ability for a small island state to make a claim altogether. For small island states, which hold substantial marine territory in proportion to their physical territory, sovereign maritime rights are significant due to the extensive natural resources they hold. Kiribati, for example, earns approximately \$20–\$35 million each year from fishing licences within its exclusive economic zone, equating to up to 23 per cent of the nation's total GDP.⁶² As resources become scarcer, it is estimated that the value of the resources found within maritime zones will be much greater by the year 2100.⁶³

The international law in relation to maritime claims and entitlements is found in the 1982 UNCLOS. The Convention divides the seas into a set of zones — internal waters, territorial seas, the contiguous zone, the exclusive economic zone and the high seas — measured from a common baseline, which accordingly prescribes the corresponding coastal state a set of entitlements.

Each maritime zone entitles a coastal state to a certain degree of sovereignty. Internal waters are equivalent to territory, with the coastal state exercising full sovereignty and control over the area. Similarly, territorial waters extending to 12 nautical miles are under the coastal state's complete sovereignty, limited only by a right of innocent passage.⁶⁴ Within the exclusive economic zone (extending to 200 nautical miles), a coastal state may enjoy rights to exploration and exploitation, conservation and management of living and non-living

62 A Powers and C Stucko "Introducing the Law of the Sea and the Legal Implications of Rising Sea Levels" in MB Gerrard and GE Wannier (eds) *Threatened Island Nations: Legal Implications of Rising Sea Levels and a Changing Climate* (Cambridge University Press, New York, 2013) 123 at 131.

63 DD Caron "When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level" (1990) 17(4) *Ecology Law Quarterly* 621 at 639.

64 UNCLOS, above n 9, arts 17–26.

natural resources in the water column, establishment of artificial islands and structures, marine scientific research and the protection and preservation of the marine environment.⁶⁵ Coastal states may also exercise sovereign rights over a continental shelf — “the natural prolongation of its land territory”⁶⁶ — if one exists, to explore and exploit natural resources in the seabed and subsoil. The area beyond this is known as the high seas where all states hold equal rights and have “freedom of the high seas”.⁶⁷

As established, baselines determine the boundaries of a coastal state’s maritime zones. UNCLOS provides several methods for establishing baselines to delimit zones. Baselines are generally measured by “normal” baselines, which determine the state’s maritime zones from the low-water mark.⁶⁸ Of particular relevance, the baseline of islands that are situated on atolls or have fringing reefs is measured from the seaward low-water line of the reef.⁶⁹ Alternatively, baselines can be measured using a “straight” baseline approach, usually used when a coastline is deeply indented or if many islands exist along a coast, by connecting various base points with a straight line.⁷⁰ It is also important to note that archipelagic states are able to use archipelagic baselines that enable them to include the outermost points of the outermost islands provided that the area of water to land ratio is within 1 to 1 and 1 to 9 and an individual baseline segment does not exceed 125 nautical miles.⁷¹

Currently, baselines are considered ambulatory. As the normal low-water line moves landward, then so will each maritime zone.⁷² For small island states, the shifting of baselines is inevitable as sea levels rise, resulting in a significant loss in the extent of zoning to which they can claim. This is particularly concerning for low-lying states that use fringing reefs or drying rocks as low-tide elevations as baselines, which could quickly become fully submerged from sea levels rising, resulting “in a loss of width of all maritime zones”.⁷³ UNCLOS provides only two circumstances where baselines can be permanently fixed: deltas and other natural conditions where the coastline is highly unstable⁷⁴ and the outer limits of the continental shelf.⁷⁵ There are no provisions that provide

65 Article 56.

66 Article 77.

67 Article 87.

68 Article 5.

69 Article 6.

70 Article 7.

71 Article 47.

72 MW Reed *Shore and Sea Boundaries: The Development of International Maritime Boundary Principles Through United States Practice* (US Department of Commerce, Washington DC, 2000) at 185.

73 Caron, above n 63, at 637.

74 UNCLOS, above n 9, art 7(2).

75 Article 76(9).

for the permanent fixing of the territorial sea, contiguous zone or the exclusive economic zone. However, in saying this, the fact that the drafters of UNCLOS were open to the fixing of baselines under certain circumstances as mentioned above suggests that the fixing of baselines under more current conditions — one being rising sea levels — may be an option for the future.⁷⁶

In addition to the gradual diminishment of breadth in maritime zones, once an island state loses its status as a state, it will also lose all claims to maritime zones. Maritime rights and entitlements can only be conferred on a state by reference to the state's baseline. A mere rock, defined as territory that cannot sustain human habitation or economic life,⁷⁷ or the lack of territory altogether would mean that a state would lose the ability to draw baselines. Consequently, as concluded from the summary of the declarative criteria for statehood of the Montevideo Convention, once an island state becomes uninhabitable, it is unlikely to be classified as a state. It is therefore at this point that a small island state will effectively be stripped of any maritime claim altogether in conjunction with its loss in statehood.

4. CURRENT RESPONSES: THE CONTINUITY OF STATEHOOD

The previous parts of this article have examined the application of statehood under a strict interpretation of the legal criteria “according to which the existence of states is seen as an extra-legal fact based on criteria of effectiveness, and statehood as a legal status independent of recognition”.⁷⁸ It has indicated that an exile of entire populations and government seems probable if sea levels continue to rise as expected, rendering small island states uninhabitable before potentially completely submerging their territory, ultimately driving these island states into extinction and extinguishing their ability to exercise sovereign rights over not only their physical territory but also maritime zones.

While it could be argued that the Montevideo criteria were established in relation to the creation of states rather than for the continuity of states, these criteria remain the starting point for any evaluation of state extinction. However, once a state has been established, some leeway may be given to small island states in maintaining their claim to statehood. While statehood is a legal concept that features determinate content, it is flexible and has historically been able to adapt to changing circumstances, evidenced through state practice.

76 D Freestone *The 1982 Law of the Sea Convention at 30: Successes, Challenges and New Agendas* (Brill, Leiden, 2013) at 52.

77 UNCLOS, above n 9, art 121(3).

78 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 241.

For example, the Montevideo criteria clearly identify an effective government as a condition for statehood. However, through state practice, even so-called “failed states”, where the effectiveness of a government has temporarily been undermined through conflict and power struggles, have generally remained classified as states. In the case of Somalia, where civil war has led to there being no form of governmental control, a claim to statehood has not been challenged by the international community. This “suggests that in the case of an established state, the presumption is in favour of the continuity of statehood not only when there is a prolonged period of ineffective government but even if there is a prolonged period of absence of government”.⁷⁹

Substantial changes or even a complete lack of territory, population or government may, therefore, not necessarily result in the extinction of a state due to the strong presumption of the continuity of existing states that is likely to play in an island state’s favour.⁸⁰ However, whether the legal concept of statehood has the ability to adapt to the scenario of a disappearing state, whereby a territory may vanish altogether, is unprecedented. Since the creation of the UN, there have been very few cases of extinction and it is notable that there is almost no case of involuntary extinction.⁸¹ A future challenge for the continued existence of an effective government for such nations is the ability to maintain and “defends its interests in the international arena”.⁸² Unlike the situations in many failed states, the collapse of an effective government is more of a permanent nature, which even the strong presumption of state continuity may not be able to prevent.

4.1 Effectiveness vs Legality — a Legal Duty for State Continuity?

This article so far has examined the factual implications of sea level rise for the validity of statehood. However, international law on statehood has two components: effectiveness and legality. The former has been examined under the Montevideo criteria — the conditions and scenarios wherein a state may lose its statehood based on factual circumstances of effectiveness. The latter, however, refers to the fundamental norms of the international legal order, known as *jus cogens*, or peremptory norms, and dictates that a state cannot become extinct if there has been a violation of such a norm. That is to say, when fundamental norms of international law are violated, the principle of legality trumps that of effectiveness, resulting in the continued granting of the status of

79 Raic, above n 41, at 71.

80 Crawford, above n 44, at 701.

81 At 715.

82 Stoutenburg “When Do States Disappear?”, above n 40, at 68.

statehood to states that have effectively disappeared.⁸³ As Stoutenburg neatly summarises:⁸⁴

What holds true for the creation of states should equally apply to their continuation: if considerations of legality have enough legal force to supersede the principle of effectiveness when it comes to the creation of states, they should have the same effect on the continuation of states that have lost the effective insignia of statehood.

A peremptory norm is defined under the Vienna Convention on the Law of Treaties as “a norm accepted and recognized by the international community of States as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character”.⁸⁵ This has since been recognised as a principle applicable beyond treaties and as an international legal doctrine. A breach of *jus cogens* has been defined as being serious if “it involved a gross or systematic failure by the responsible State to fulfil the obligation”.⁸⁶ Stoutenburg argues that the extinction of a state as a result of anthropocentric climate change violates the fundamental norms of self-determination and permanent sovereignty of its natural resources. She holds that if such violations can be proven, it would place a legal duty on other states to continue to recognise such states that have lost their effective statehood.⁸⁷

Generally, even an accidental breach of a peremptory norm in the context of a treaty will result in the invalidity of the entire treaty. This is because treaties involve an element of volition in the sense that treaty provisions are intentionally included, even if the violation of the peremptory norm was not intended in line with that provision. In cases where this element of volition is not present, such as in the case of statehood, violations need to pass a higher threshold. The illegality must be “so central to the existence or extinction of the entity in question that international law may justifiably treat an effective entity as not a State”.⁸⁸

Due to the nature of climate change in that no one nation can be solely to blame, it is difficult to apportion legal responsibility and hold states accountable for breaching such a norm. In the present context, it is not the physical release

83 At 59.

84 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 316.

85 Vienna Convention on the Law of Treaties (signed 23 May 1969, entered into force 27 January 1980), art 53.

86 UN GOAR, International Law Commission *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, 56th Sess, Supp No 10, 43 (2001), art 40(2).

87 Stoutenburg “When Do States Disappear?”, above n 40, at 76–77.

88 Crawford, above n 44, at 105.

of greenhouse gas emissions that is the relevant conduct attributable to states, but rather the failure or omission by states to effectively regulate greenhouse gas emissions of their private individuals and companies.⁸⁹ It is the failure of states to take such measures in accordance with climate regimes, primarily the UNFCCC and Kyoto Protocol, which must therefore be the cause for the disappearance of small island states. Consequently, only those emissions that exceed binding legal standards can be used to prove that the consequences of climate change have been the main contributor to the extinction of small island states. Unfortunately, because of the low emission standards that have been imposed on countries in the past, with standards only first being introduced in 1997 with the implementation of the Kyoto Protocol, a very small fraction of emissions have been emitted in violation of legal duties. Until recently, developing nations have been excluded from any emissions targets, and big emitters, such as the US and China, have not committed to any targets.⁹⁰

Thus, due to the nature of climate change and the weak obligations that have been established in response to it, enforcing a legal duty for the continued recognition of statehood proves a challenge.⁹¹ Consequently, it appears that since “considerations of legality can arguably not safeguard the survival of small island states ... since these states are not extinguished in violation of peremptory norms of international law”,⁹² then a legal duty for the continued recognition of such states does not arise.

4.2 State Practice and the Equitable Preservation of Statehood

Despite it being difficult to establish a legal duty for the continued recognition of statehood, there is a possibility that states may continue to recognise small island states out of “a sense of international justice and solidarity”.⁹³ The continuity of statehood would subsequently depend on the continued recognition under state practice despite the legal indicia of statehood beginning to diminish, and would likely result in a new era of statehood. Burkett argues that the “possibility for flexibility coupled with the strong presumption that favours the continuity and disfavors the extinction of an established state suggests the acceptance of creative interpretations of law”.⁹⁴

89 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 364.

90 See the 2015 Paris Agreement to the UNFCCC (signed 12 December 2015, not yet in effect), which sparked a new approach to combat greenhouse gas emissions through the implementation of nationally determined contributions by all parties; however, with few enforcement mechanisms and too early to tell how effective the regime will be.

91 Stoutenburg “When Do States Disappear?”, above n 40, at 59.

92 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 374.

93 At 375.

94 M Burkett “The Nation Ex-Situ: On Climate Change, Deterritorialized Nationhood and the Post-Climate Era” (2011) 2 *Climate Law* 345 at 354–355.

International law, through state practice, has not rejected the concept of a “deterritorialised” state. The continued recognition of deterritorialised governance has historically been done in three ways: through the existence of governance entities that have no territory; through governments-in-exile; and through legal entities that have the same standing in the international legal arena as that of a sovereign state.

The Sovereign Military Order of St John of Jerusalem, of Rhodes and of Malta, simply known as the Sovereign Order of Malta, maintains its sovereign functions and holds diplomatic status, despite, albeit controversially, lacking any territory since 1798 when Napoleon Bonaparte occupied the island. Today the Sovereign Order simply operates out of its two headquarters in Rome. While not being a state, the Order is considered as a sovereign political entity equal to a state, has an international personality, is recognised by over 90 states and is an observer at the UN General Assembly.⁹⁵

Governments-in-exile — governments that have been forcibly separated from their territory — have also throughout history had the ability to hold the legitimate control and authority of government despite losing possession and jurisdictional control over their population and territory. However, in order for such a government to retain such accreditation, it must be accepted and continue to be recognised by the international community as holding the constitutional legitimacy to its territory or area.⁹⁶ Some of the earliest instances of governments-in-exile arose throughout the First and Second World Wars, where, for example, the governments of Belgium, Czechoslovakia, Greece, Luxembourg, the Netherlands, Norway, Poland and Yugoslavia operated out of London.⁹⁷ The Polish government-in-exile provides an interesting example, as the government was derecognised by the British government in 1945. However, despite losing recognition by the host state, the exiled government maintained its recognition as the government of Poland by other states, illustrating the possibility of toleration of such a government despite the non-recognition by a few, and that this does not necessarily result in the discontinued existence of an exiled government.⁹⁸

While the case of disappearing states involves different circumstances, McAdam highlights that the fact that governments-in-exile can exist and are

95 CM Constantinou “Irregular States or the Semiotics of Knight-Errantry” (2004) 17 *International Journal for the Semiotics of Law* 229.

96 Rayfuse and Crawford, above n 34, at 8.

97 FE Oppenheimer “Governments and Authorities in Exile” (1942) 36(4) *The American Journal of International Law* 568 at 571.

98 S Talmon “Who is a Legitimate Government in Exile? Towards Normative Criteria for Governmental Legitimacy in International Law” in G Goodwin-Gill and S Talmon (eds) *The Reality of International Law: Essays in Honour of Ian Brownlie* (Oxford University Press, Oxford, 1999) 499.

recognised legitimately suggests that territory, while it may be necessary for the original constitution of a state, is not necessarily essential for “certain governmental functions”.⁹⁹ In the context of small island states, such a concept could be applied to a delocalised government so long as the exiled government still represented an effectively existing state.¹⁰⁰ More precisely, so long as the functions of the island state’s government are not interfered with or controlled by an authority from another state, the island state’s independence can be maintained, meaning the island state would retain its status of sovereignty. However, McAdam states that, over time, the ability to maintain such independence will be weakened. The idea of a government-in-exile is premised on there still being an “identifiable population over which the government has jurisdiction”.¹⁰¹ Over time, as its people become more and more integrated into their host state, the ability for the exiled government to enforce its own decisions and be held accountable under international law for its own actions will “wane”.¹⁰²

Lastly, economic entities, such as the European Union and Taiwan, have more recently been recognised by international law as holding aspects of sovereign rights despite not being classified as a state, and therefore, not holding any of the criteria for statehood.¹⁰³

Taking these precedents of alternative forms of the state, state practice has illustrated that international law permits the separation of sovereignty and territory in certain circumstances. Consequently, it is possible that international law may be able to respond to the issue of disappearing states whereby the traditional criteria for statehood may be disjointed. State practice insinuates that the international community may be willing to continue to accept maintenance of the “status quo”¹⁰⁴ — that is, maintaining an island state’s claim to statehood. Kälin notes that it is unlikely that island states would declare their extinction and withdraw their membership from the UN, and it would be difficult to imagine other UN members damaging their own reputation out of a lack of compassion for the predicament such states are in by excluding them from international organisations.¹⁰⁵ So long as island states have the ability to possess a government and population maintaining citizenship, even if territory no

99 McAdam, above n 1, at 115.

100 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 286.

101 McAdam, above n 1, at 115.

102 At 116.

103 R Rayfuse “W(h)ither Tuvalu? International Law and Disappearing States” (University of New South Wales Faculty of Law Research Series No 9, 2009) at 11.

104 McAdam, above n 1, at 116.

105 W Kälin “Conceptualising Climate-Induced Displacement” in J McAdam (ed) *Climate Change and Displacement: Multidisciplinary Perspectives* (Hart, Oxford, 2010) 81 at 102.

longer exists, it is possible for international law to provide for their continued existence.

4.3 Concluding Remarks: Continuity of Statehood, State Practice and Future Challenges

Through state practice, it is likely that island states will continue to be recognised as states for some period of time even as rises in sea levels begin to erode the indicia of statehood. However, historically, the presumption of state continuity has been associated with a temporary loss of territory, population or government. Thus, international law usually only accepts a temporary departure from the principle of effectiveness. A government-in-exile, for example, is “warranted by the hope of recovering control over territory”¹⁰⁶ again. In the scenarios of governments-in-exile throughout the world wars, an important element of belligerent occupation for the continued recognition of the ousted government is “that [the occupation] is provisional and temporary”.¹⁰⁷ Park notes that, for small island states threatened by sea level rise, “insofar as there was a possibility that the elements of statehood could be restored, continuity of the State would likely not be questioned”.¹⁰⁸ However, the loss of an entire territory and an exile of an entire population and government due to rising sea levels pose a more permanent threat to the very existence of such features. A government-in-exile may be only a temporary solution, dependent on whether the international community continues to recognise its standing as a state. Consequently, future issues arise in association with the permanency of the effects rising sea levels are likely to bring.

Island states have already begun and will continue to adapt and preserve their territory and maritime zones as much as they can through measures such as engineering (such as sea walls and flood levees), technological advances, ecological restoration, laws and regulations, disaster risk reduction and human development.¹⁰⁹ However, it is inevitable, on the assumption that predictions are accurate, that the loss of territory and population along with the associated loss of effective governmental control and authority over such a territory will last indefinitely. This would mean that the rationale behind an exiled nation and recognition of a government-in-exile would need to be revised, as the chance of recovering control over the once-known territory will be nearly impossible

106 Cassese, above n 32, at 73.

107 K Marek *Identity and Continuity of States in Public International Law* (Librairie E Droz, Geneva, 1954) at 80.

108 S Park *Climate Change and the Risk of Statelessness: The Situation of Low-lying Island States* (United Nations High Commissioner for Refugees, Division of International Protection, PPLA/2011/04, May 2011) at 8.

109 IPCC 2014: *Synthesis Report*, above n 11, at 27.

unless the territory were to re-emerge. In such a case, whether or not the international community will continue to recognise a disappearing state as a state remains uncertain. This perhaps may lead to a contemporary approach to current understandings of statehood, which will now be examined.

5. NEED FOR A NEW ERA OF STATEHOOD: THE “DETERRITORIALISED” STATE PROPOSAL

While current international law may provide some assistance in the avoidance of state extinction of small island states in the short term, the uncertainties and novelty of such an issue will in the long term require a revised approach to the current understanding of statehood. If we do not adapt our laws to our changing environment it will result in unjust outcomes for small island states, as it would strip their peoples of a whole set of rights, entitlements and a very identity to which they have every right. Fundamental changes will need to occur in relation to the organisation and operation of a disappearing state if the international community is to continue to recognise its claim to statehood and the associated sovereignty of that nation.

As the current concept of a government-in-exile appears to provide only a temporary solution unless the basis of its existence is fundamentally reformed, various solutions have been suggested for small island states that are threatened by the disappearance of their territory in order to maintain statehood and an international legal personality. It has firstly been proposed that such states could acquire territory from another state through a treaty of cession or acquisition of title to new territory. However, in today's world, finding a government which would be willing to provide such territory seems unlikely. Secondly, the construction of artificial islands and structures has also been suggested. Through land reclamation, the Maldives has already constructed the artificial island of Hulhumalé covering 188 hectares that today is home to several thousand people.¹¹⁰ However, difficulties arise in relation to engineering, financial and legal hurdles. An artificial island cannot currently gain independent jurisdiction or maritime zones and does not possess the status of an island. Instead it falls under the jurisdiction of the coastal state that is within 200 nautical miles.¹¹¹ Currently, Hulhumalé has not yet had to face such a challenge as it remains within the straight archipelagic baselines of the Maldives. Similarly, the Netherlands has continued to exercise sovereign rights over the extended landmass that it has reclaimed, which has not been challenged. This, however, does not mean there will be no future objections to such territory. On the other

110 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 169.

111 UNCLOS, above n 9, art 60.

hand, whether the international community may choose to recognise an artificial island as “territory” for the purposes of statehood out of fairness and equity remains uncertain but is nonetheless possible.¹¹² Reinforcing natural territory, however, does not result in territory being deemed artificial — though whether an island state has the financial and technical ability to prevent such a degree of rising is questionable.¹¹³ Lastly, a merger has also been proposed, yet this would result in a loss of culture, national identity and control over claims to resources and ultimately would not uphold the continued existence of the nation-state as it would simply be absorbed by its merging state.¹¹⁴

It is argued that the most equitable solution for the continued recognition of a disappearing state is through a new category of international entity — a “deterritorialized state”, or a nation *ex-situ*. In the words of Burkett, “deterritorialized statehood is an appropriate means for [the] continued existence”¹¹⁵ of sinking island states. Other legal scholars in the area have also contemplated such an idea, Rayfuse remarking, “ultimately, a more equitable solution may lie in recognition of a new category of deterritorialized state”,¹¹⁶ while Stoutenburg has further commented: “[T]he creation of a new category of states with more narrowly circumscribed competences could be envisioned for ‘deterritorialized’ states.”¹¹⁷

5.1 The “Deterritorialized” State

The deterritorialized state proposal makes two claims:¹¹⁸

- (1) The people of a vanishing island state could continue to exercise sovereign control over their abandoned, now uninhabitable, territory, and
- (2) when the island state eventually becomes completely inundated (if it ever happens) the people could continue to exercise sovereign control over what used to be their territorial waters.

Deterritorialized statehood, as a means for the continued existence of a sovereign state, entails that the citizens and descendants of an island state can maintain at least some part of their right to self-determination through the

112 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 175.

113 See UNCLOS, above n 9, art 121 requirements that an island is an area of land, surrounded by water, which is above high tide.

114 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 184.

115 Burkett, above n 94, at 355.

116 Rayfuse “W(h)ither Tuvalu?”, above n 103, at 9.

117 Stoutenburg *Disappearing Island States in International Law*, above n 13, at 378.

118 J Odalen “Underwater Self-determination: Sea-Level Rise and Deterritorialized Small Island States” (2014) 17(2) *Ethics, Policy & Environment* 225.

exercise of an independent and autonomous authority acting in the collective's best interests over their (once) territory and waters. Practically, this would have to be done through an entity of a government or authority, such as a government-in-exile as examined above, who "would act as a trustee of the assets of the state for the benefit of its citizens wherever they might now be located",¹¹⁹ managing the affairs of a country from a distance.

Burkett's model of a nation *ex-situ* aims to preserve all elements that the nation-state experiences extraterritorially, including "the persistence of culture, connection amongst its people, and the security and well-being of its citizens ... serv[ing] as a vital political and cultural nucleus".¹²⁰ Burkett suggests that the nation *ex-situ* could use the UN International Trusteeship System as a model for the governance of a nation that has no habitable territory.¹²¹ While the object of the UN Trusteeship System in 1945 differs substantially — with the purpose of gaining independence and self-governance — the basic objectives of furthering international peace and security, and promoting the advancement of political, economic, social and educational development of the peoples affected consistent with their freely expressed wishes is applicable to the preservation of disappearing states.¹²² Under such a regime, elected trustees would administer the "territory" of the island state in trust for the benefit of the citizens and descendants of that territory.¹²³

However, a consequence of such a concept would be that the powers and duties of the state would be limited as compared to what they once were. Many treaties the island state may have been subject to may become terminated solely because their duties and obligations may become impossible to perform or because of a fundamental change in circumstances. Additionally, powers in relation to the island state's own population will also be limited as they increasingly come under the jurisdiction of the host state.¹²⁴ Yet despite these limitations, governments-in-exile in the past have been able to exercise

119 R Rayfuse "International Law and Disappearing States: Utilising Maritime Entitlements to Overcome the Statehood Dilemma" (University of New South Wales Faculty of Law Research Series, Paper No 52, 2010) at 11.

120 Burkett, above n 94, at 363.

121 The UN International Trusteeship System was established in 1945 with the focus to "promote the political, economic and social advancement of the Territories and their development towards self-government and self-determination". Today, all of the territories that were placed under the system have become independent states or have voluntarily become associated with another state; hence the Security Council terminated the system in 1994. See United Nations "International Trusteeship System" <<http://www.un.org/en/decolonization/its.shtml>>.

122 Charter of the United Nations (signed 26 June 1945, entered into force 24 October 1945), art 76.

123 Burkett, above n 94, at 363.

124 McAdam, above n 1, at 114–115.

functions in treaty-making, maintaining diplomatic relations, and conferring certain privileges and protection over their own nationals, in particular the exercise of diplomatic protection.¹²⁵ As mentioned, this would also provide an island state with an avenue of maintaining rights to resources and maritime zones and claims in light of the changing environment. While the human rights element of disappearing states is beyond the scope of this article, an important element is the ability of the exiled government to continue to defend and administer the interests of its own nationals and in preventing its own citizens from being deemed stateless.

It cannot be denied that a post-climate era will bring dramatic changes not only to the physical environment around us, but also to the underlying organisations of human society. Our current understanding of statehood is one system that will encounter numerous legal challenges as a result of anthropocentric climate change. Accordingly, a contemporary understanding of statehood needs to be faced. Preserving statehood, through the concept of a deterritorialised state or a nation *ex-situ*, provides for an adequate, albeit admittedly not desirable, response in light of the circumstances confronting small island states that are threatened by extinction.

5.2 Preservation of Maritime Claims

In a similar manner to the law on statehood, the law surrounding the maritime jurisdiction of disappearing states will also have to be revised. It is acknowledged that if the statehood of a small island state can be preserved, its sovereign rights to maritime entitlements will also be preserved. However, the uncertainty and potential conflict, combined with the inequitable impact on small island states that would ensue as a result of constant shifting or eliminating of baselines under current law, requires a modified approach to the law of baselines.

It is quite conceivable that island states threatened by sea level rise will go to great lengths to preserve present baselines even though this appears irrational — committing resources to preserve a physical feature purely because the consequences of preserving it are valuable rather than because it is valuable in itself is an inefficient use of time and investment. Yet Caron argues that this is exactly what the law of baselines demands: “The law of baselines encourages overinvestment in activities that the law defines as necessary to retain legal possession.”¹²⁶

Many scholars argue that freezing the currently accepted boundaries of maritime zones is the best way forward. As Caron neatly summarises:¹²⁷

125 At 115.

126 Caron, above n 63, at 639–640.

127 At 645.

The greater the strain imposed on all states by climate change, the larger the shifts in baselines and the greater the uncertainty in maritime boundaries. Since uncertainty in boundaries is a prime ingredient in many recipes for interstate and private transnational conflict, maintaining the current system of moving baselines invites such conflict. The fixing of boundaries would create more certainty.

The fixing of current maritime boundaries could be done either through the creation of a new rule, or by liberally interpreting current law. In relation to the latter, (re)interpreting UNCLOS, art 7(2), where straight baselines are able to be fixed for “unstable coastlines”, to include instability in the context of sea level rise would be favourable. In addition, art 7(5) holds that account may be taken of the economic interests of the coastal state where the drawing of straight baselines is applicable. Clearly, maritime boundaries hold significant economic value, particularly for small island states whose economies largely depend on the activities within such zones. These subsections combined “may provide new opportunities for States to draw straight baselines and to do so in such a way as to maintain their existing maritime zones”¹²⁸ for coastlines that were stable but may now be unstable. Various other mechanisms include declaring any straight or archipelagic baseline claims to the UN Secretary-General, as doing so applies a presumption of permanence, or through the delimitation of boundaries through bilateral treaties.¹²⁹

However, it is the fixing of baselines through new law that is preferable. Caron argues that freezing current baselines is the most fair and equitable solution, as it would simply freeze the allocation of resources and maritime jurisdiction as they currently stand, meaning that no state would gain any additional entitlements even as coastlines alter.¹³⁰ Similarly, Judge José Luis Jesus of the International Tribunal for the Law of the Sea has noted that once baselines have been established under UNCLOS, they should be given an element of permanency whether sea levels rise or not.¹³¹ Freezing baselines lies in accordance with the objective of UNCLOS, which is to achieve and promote peace, stability, certainty, fairness and efficiency in ocean governance.¹³² Furthermore, the freezing of baselines is an approach that is consistent with

128 R Rayfuse “Sea Level Rise and Maritime Zones: Preserving the Maritime Entitlements of ‘Disappearing States’” in MB Gerrard and GE Wannier (eds) *Threatened Island Nations: Legal Implications of Rising Sea Levels and a Changing Climate* (Cambridge University Press, New York, 2013) 167 at 182.

129 At 183–186.

130 Caron, above n 63, at 640–641.

131 JL Jesus “Rocks, New-born Islands, Sea Level Rise and Maritime Space” in JA Frowein, K Scharioth, I Winkelmann and R Wolfrum (eds) *Verhandeln für den Frieden — Negotiating for Peace* (Springer-Verlag, Berlin, 2003) 602.

132 UNCLOS, above n 9, preamble.

upholding the doctrine of the continuity of statehood.¹³³ How such amendments would be implemented goes beyond the scope of this article, yet it is clear that a change in the way baselines are determined is crucial if states are to maintain what is currently rightfully theirs.

6. CONCLUSION

While small island states play one of the most minimal roles in contributing towards anthropocentric climate change, such nations are faced with some of the harshest consequences. By the end of the 21st century, it is possible that small island nations will eventually be made uninhabitable as a result of sea level rise. At worst, such nations face extinction. Yet, such extinction is unprecedented in international law. There is no successor, no change in politics; territory may simply vanish altogether. Our physical environment around us is changing, and “inasmuch as nature declines to negotiate, it is we and our law which must adapt”.¹³⁴ This article has examined one such area that needs to adapt to the changing environment — the law surrounding statehood and sovereignty for disappearing states. As sea levels rise, applying the current declarative criteria of statehood will eventually render such nations extinct. In addition, current international law under UNCLOS will result in the shrinking and eventual loss of maritime zones and claims altogether. While state practice suggests that it is likely that there will be a presumption of state continuity even as the indicia of statehood begin to erode, how long the international community will continue to recognise such states as nation-states remains uncertain. To achieve equity, security and certainty in the future for small island states, and in order to preserve the status of statehood, the law needs to adapt. Establishing a new category of the state — a “deterritorialised” state — along with the fixing of maritime baselines, has been suggested as the best means for preserving the statehood of nations whose status is threatened by causes beyond their control. Unless change is sought, low-lying nations such as the Maldives, the Marshall Islands, Kiribati and Tuvalu could regrettably become consigned to the history books. In simple terms, the world at large bears a moral duty to provide the assistance and tools necessary for small island states to adapt to the changing environment and the future that lies ahead of them. Those who have generated the consequences must also tackle them, not just those who will bear the disproportionate physical burdens imposed.

133 Rayfuse “Sea Level Rise and Maritime Zones”, above n 128, at 191.

134 Caron, above n 63, at 653.